

THE PHYSIOLOGIST

The American Physiological Society was founded in 1887 for the purpose of promoting the increase of physiological knowledge and its utilization. The APS Constitution and Bylaws appears in the FASEB Membership Directory. Officers: *President*, Howard E. Morgan, Pennsylvania State University, Hershey, PA; *Past President*, John B. West, University of California, La Jolla, CA; *President-Elect*, Franklyn G. Knox, Mayo Medical School, Rochester, MN; *Council*, Shu Chien, Harvey V. Sparks, Jr., Norman C. Staub, Aubrey E. Taylor; *Executive Secretary-Treasurer*, Martin Frank, 9650 Rockville Pike, Bethesda, MD 20814.



A Publication of the American Physiological Society, Martin Frank, Editor

Volume 28, Number 6

December 1985

Editorial

A Century of Progress. M. Frank	462
---------------------------------------	-----

APS News

Affiliate APS Societies	462
"From Russia With Love." J. B. West and O. E. Reynolds	463
134th APS Business Meeting	465
APS Sections (Teaching of Physiology and MYOBIO Group)	467
Committee Reports (Centennial Celebration and Program Executive)	467
36th Annual APS Fall Meeting	468
Honors and Awards	470
Honorary Members	470
Membership Status	472
Member Contributions	473
Evelyn M. Anderson (1899-1985)	474
James Daniel Hardy (1904-1985)	475
Deaths Reported Since the 1985 Spring Meeting	475
News From Senior Physiologists	476

Public Affairs

Congress Establishes Broader National Policy for Lab Animal Welfare. W. M. Samuels	477
ACDP Survey on Use of Animals in Teaching Physiology. G. S. Greenwald	478
Opinions. T. H. Jukes	480

Historical Section

Department of Physiology and Biophysics at University of Kentucky. L. L. Boyarsky	482
Department of Physiology and Biophysics at University of Oklahoma Health Sciences Center. A. K. Weiss ..	485
History of Physiology at The Ohio State University. M. A. Lessler and F. A. Hitchcock	491
Short History of the Election Process. O. E. Reynolds	501

The Physiology Teacher

Pathophysiology of Temperature Regulation. D. Mitchell and H. P. Laburn	507
Laboratory Exercise on Active Transport. A. Stalheim-Smith and O. K. Fitch	517
Books Received	529

LSRO Report

Muscle Atrophy During Space Flight: Research Needs and Opportunities. G. J. Herbison and J. M. Talbot ..	520
--	-----

Announcements	528
---------------------	-----

People and Places	530
-------------------------	-----

Positions Available	530
---------------------------	-----

Index	531
-------------	-----

The Physiologist (ISSN 0031-9376) is published bimonthly by the American Physiological Society, 9650 Rockville Pike, Bethesda, MD 20814. Subscriptions: Distributed with the *Physiology Teacher* to members as part of their membership; nonmembers and institutions, \$60.00 per year in the United States; elsewhere \$75.00. Single copies and back issues, including Fall Abstracts issue, when available \$12.00 each. The American Physiological Society assumes no responsibility for the statements and opinions advanced by contributors to *The Physiologist*.

Cover: Illustration of the APS Centennial Medallion.

Editorial

A Century of Progress

As we approach our Centennial Celebration, it is time for us to look to the future of physiology and the potential for new and exciting discoveries. However, it is also time to look back at a century of progress in physiology and consider the vision of our founders. Did Mitchell, Bowditch, Martin, Chittenden, and Curtis have the vision to contemplate the degree to which we currently understand the internal workings of the living organisms? I sense that their vision, like that of many of us, might have been more shortsighted. However, these five men did have the vision to hold the first meeting of APS on December 30, 1887, and thereby provide physiologists with a means to facilitate the exchange of their research findings. As a result, APS has provided a forum for thousands of investigators to share new levels of physiological understanding.

Our founders' vision of a society of physiologists has contributed to the great discoveries made over the last century: from cardiac physiology to cardiac transplantation; from nerve conduction to neural circuitry; from DNA to gene therapy. One hopes that these men might have envisioned some of these discoveries and the role APS would play in them. For our founders, physiological research was performed in research laboratories on terra firma. One wonders whether they would have anticipated the potential for research performed by John West at the heights of Mt. Everest. Or could they envision physiological research being performed 100 miles above earth by APS member, Robert Phillips, on the NASA Space Shuttle Life Sciences Laboratory. While the potential for research at that altitude is phenomenal, the scheduled February 1987 launch will be a fitting tribute to "A Century of Progress in Physiology."

During 1986, the APS staff will strive to prepare the Society for its Centennial Celebration in 1987. FASEB '86, the IUPS Congress, and the Fall APS Meeting will all provide focus to the birthday celebration. In addition, the Centennial Committee is preparing a gala celebration for FASEB '87 (see page 467), a celebration

Proposed Amendment to the Bylaws for Society Sections and Affiliations

The following amendment to the Bylaws approved by Council will be offered for vote at the Society Business Meeting, Wednesday, April 16, 1986.

ARTICLE X. *Society Sections and Affiliations* Current Bylaw

SECTION 2. *Society Affiliations.* The Society shall maintain membership in such organizations as determined by Council.

Proposed Bylaws

SECTION 2. *Society Affiliations.* The Society shall maintain membership in such organizations as determined by Council. **The Council shall authorize affiliation of societies having mutual interests to the Society upon approval of the membership.**

that, hopefully, the entire APS membership will be able to attend.

Looking toward the future, in 1986 the Society will embark on a joint venture with the IUPS in the publication of *News in Physiological Sciences* (NIPS). Distinguished scientists will contribute timely reviews of trends in physiology that will have an impact on the profession by providing a forward and dynamic vision of our science. This new international journal will include an update on developments in physiology worldwide and will be mailed to APS members with *The Physiologist*.

Beginning in 1986, *The Physiologist* will undergo a change to become a 16-page newsletter catering to the needs of the membership and serving as the organ for communication of APS news and information. While some of the current features will be lost or moved to other APS journals, a number of new features will be added. In fact, some of the new features have been included in the current issue. *The Physiologist* will continue to be distributed to all APS members.

Mark your calendar for March 29, 1987. The Centennial Celebration starts today but culminates in Washington, DC, on that date. Remember, for the founders of APS, the future is now!

Martin Frank
Executive Secretary-Treasurer

Affiliate APS Societies

During the past several years, the APS Council has been in the process of negotiating possible affiliations with a number of societies in the field of physiology sciences which possess mutual interests and goals of the Society. It should also provide a mechanism to stimulate new growth and interest in APS. As a result of these discussions the Council is pleased to announce the pending affiliation of the Microcirculatory Society with APS.

The concept of affiliation has arisen because both "APS and the Microcirculatory Society have a mutual interest in certain areas of scientific investigation and reporting," and "... the two societies draw some of their membership from the same segment of the scientific community." The affiliation of The Microcirculatory Society, or for that matter any society, with the APS should enable both societies "... to accomplish their purposes in an efficient basis and to improve communication between the two societies and among the members of the two societies and with the public at large."

As part of the Compact for Affiliation, the APS will provide the Microcirculatory Society with a number of services for which APS will be reimbursed. In addition, members of the Affiliate Society will have access to a number of APS privileges as described in the compact. The total text of the compact will be published in the February issue of *The Physiologist*.

To facilitate the affiliation of the Microcirculatory Society, as well as other societies, with the APS, it is necessary to amend our Bylaws. At the Fall Meeting in Niagara Falls, the APS Council recommended that the Bylaws be amended to require the membership to approve the affiliation of another society with APS. The proposed amendment to the Bylaws is shown in the adjacent shaded box and will be voted on at the Spring APS Business Meeting.